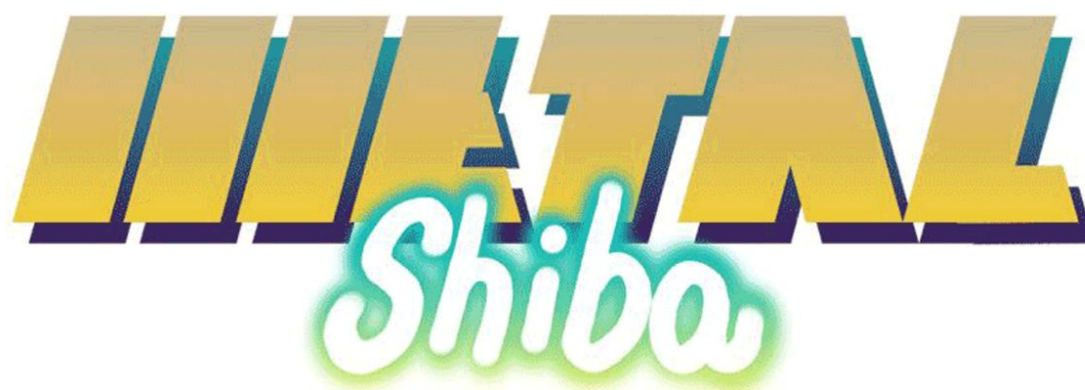# Project Audit

Project:

Metal Shiba

May 25, 2022

Overview

This audit has been prepared for **Metal Shiba** to review the main aspects of the project to help investors make an informative decision in the research process.

You will find a a summarized review of the following main key points:

- Contract's source code
- Project and team
- Website
- Social media & online presence

NOTE: We ONLY consider a project safe if they receive our "Certificate of Trust" NFT. This report only points out any potential red flags found in our analysis. Always do your own research before investing in a project.

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Smart Contract Review

The contract review process pays special attention to the following:

- Testing the smart contracts against both common and uncommon vulnerabilities
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

"The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal"
- SpyWolf Team

Smart Contract Summary

Contract Name	MetalShiba
Ticker	METAL
Contract	0x5F97fe9ecbb3158107EF81378b837bc2CE3A7127
Network	Binance smart chain
Language	Solidity
Tax	**Buy: 8%** **Sell: 10%**
Total Supply	21,000,000,000
Status	Not launched

Current stats

Burn	No burnt tokens
LP Address	Liquidity not added yet
Liquidity	Liquidity not added yet
MaxTxAmount	210,000,000

Issues Checking Status

Issues Checking Status	
Design Logic	**Passed ✓**
Compiler warnings.	**Passed ✓**
Private user data leaks	**Passed ✓**
Timestamp dependence	**Passed ✓**
Integer Overflow and Underflow	**Passed ✓**
Race conditions and Reentrancy. Cross-function race conditions	**Passed ✓**
Possible delays in data delivery	**Passed ✓**
Oracle calls	**Passed ✓**
Front running	**Passed ✓**
DoS with Revert	**Passed ✓**
DoS with block gas limit	**Passed ✓**
Methods execution permissions	**Passed ✓**
Economy model	**Passed ✓**
The impact of the exchange rate on the logic	**Passed ✓**
Malicious Event log	**Passed ✓**
Scoping and Declarations	**Passed ✓**
Uninitialized storage pointers	**Passed ✓**
Arithmetic accuracy	**Passed ✓**
Cross-function race conditions	**Passed ✓**
Safe Zeppelin module	**Passed ✓**
Fallback function security	**Passed ✓**

Featured Wallets

Owner address	0x64358a8Dd8AabEb7181be9d4341AC2aD87Fd8bC2
Marketing fee receiver1	0x88a0a39f4ed5322fa5Ede28d24602e241DEb26F4
Marketing fee receiver2	0xE4d073908fe4350d9004a01EEe66b32F74D5e4E4
Team fee receiver	0x2bB4E1D59770D48E32785d04043CE5646Cd85f50
LP address	Liquidity not added yet

Top 3 Unlocked Wallets

Wallet 1 (100%)	Same as owner

*Tokens are not distributed yet

Security Threats

Owner can change buy/sell/transfer fees up to 20% (combined buy+sell = 40%).

```solidity
function setMultipliers(uint256 _buy, uint256 _sell, uint256 _trans) external onlyOwner {
    require(_buy <= 200, "Fees too high");
    require(_sell <= 200, "Fees too high");
    require(_trans <= 200, "Fees too high");
    sellMultiplier = _sell;
    buyMultiplier = _buy;
    transferMultiplier = _trans;
}

function setFees(uint256 _liquidityFee, uint256 _marketingFee, uint256 _teamFee,
 uint256 _referralFee) external onlyOwner {
    require(_liquidityFee + _marketingFee + _teamFee + _referralFee <= 10,
     "Total Fees cannot be more than 10%");
    liquidityFee = _liquidityFee;
    marketingFee = _marketingFee;
    teamFee = _teamFee;
    referralFee = _referralFee;
    totalFee = _liquidityFee + _marketingFee + _teamFee + _referralFee;
}

function takeFee(address sender, uint256 amount, address recipient) internal returns (uint256) {
    uint256 multiplier = transferMultiplier;
    if(automatedMarketMakerPairs[recipient]){
        multiplier = sellMultiplier;
    } else if(automatedMarketMakerPairs[sender]){
        multiplier = buyMultiplier;
    }

    uint256 feeAmount = amount * (totalFee) * (multiplier) / (feeDenominator * 100);
..................
}
```

Security Threats

Owner can change discount price up to 30% for tokens purchased via contract's 'buytokens_DiscountAndLock' function.
Tokens' redeem period can be changed up to 4 days as follows:
If discount is set at 0 - tokens redeem period is 0 days.
If discount is set below 10% - tokens redeem period is 1 day.
If discount is set between 10% and 20% - tokens redeem period is 2 days.
If discount is set above 20% - tokens redeem period is 4 days.

```solidity
function updatediscount(uint256 _discount) external onlyOwner{
    require(_discount <= 30,"Discount too high");
    discount = _discount;
    if(_discount == 0)
    redeemPeriod = 0;
    else if(_discount <= 10)
    redeemPeriod = 1 days;
    else if(_discount >= 10 && _discount <= 20)
    redeemPeriod = 2 days;
    else redeemPeriod = 4 days;
}
```

⚠️ Owner can forbid claim of tokens purchased via contract's 'buytokens_DiscountAndLock' function.

```solidity
function set_Resale_state(bool status) external onlyOwner {
    Resale_open = status;
}

function RedeemTokens() external {
    ..............
    require(Resale_open,"Not active yet");
    ..............
}
```

Security Threats

Owner can set cooldown between sells up to 10 minutes.

```solidity
function updateCooldown(bool state, uint256 time) external onlyOwner{
    require(time <= 10 minutes);
    coolDownTime = time;
    coolDownEnabled = state;
}
```

Security Threats

Owner can forbid tokens farming for new farmers that currently does not exist.

```solidity
function set_farming_state(bool status) external onlyOwner {
    is_farmable = status;
}

function farmTokens(address friend) external {
    require(is_farmable && is_farmer[msg.sender],"Not farmable");
    require(referred_by[friend] == msg.sender,"Wrong referral");
    require(!PointStaked[friend],"Already staked");
    require(balanceOf(friend) >= ReferTreshold,"Buy more");
    require(balanceOf(msg.sender) >= ReferTreshold,"Buy more");
    require(launchedAt != 0,"Not launched yet");
    require(block.timestamp - lastsync < 10 minutes,"Please sync earnings first");
    if(OGdeposit_time[msg.sender] == 0) {
        farmers.push(msg.sender);
        OGdeposit_time[msg.sender] = block.timestamp;
    }
    // Update the farming balance in mappings
    farm_active[msg.sender] = true;
    deposit_time[msg.sender] = block.timestamp;
    points_balance[msg.sender]++;
    PointStaked[friend] = true;
    total_points_balance++;
}
```
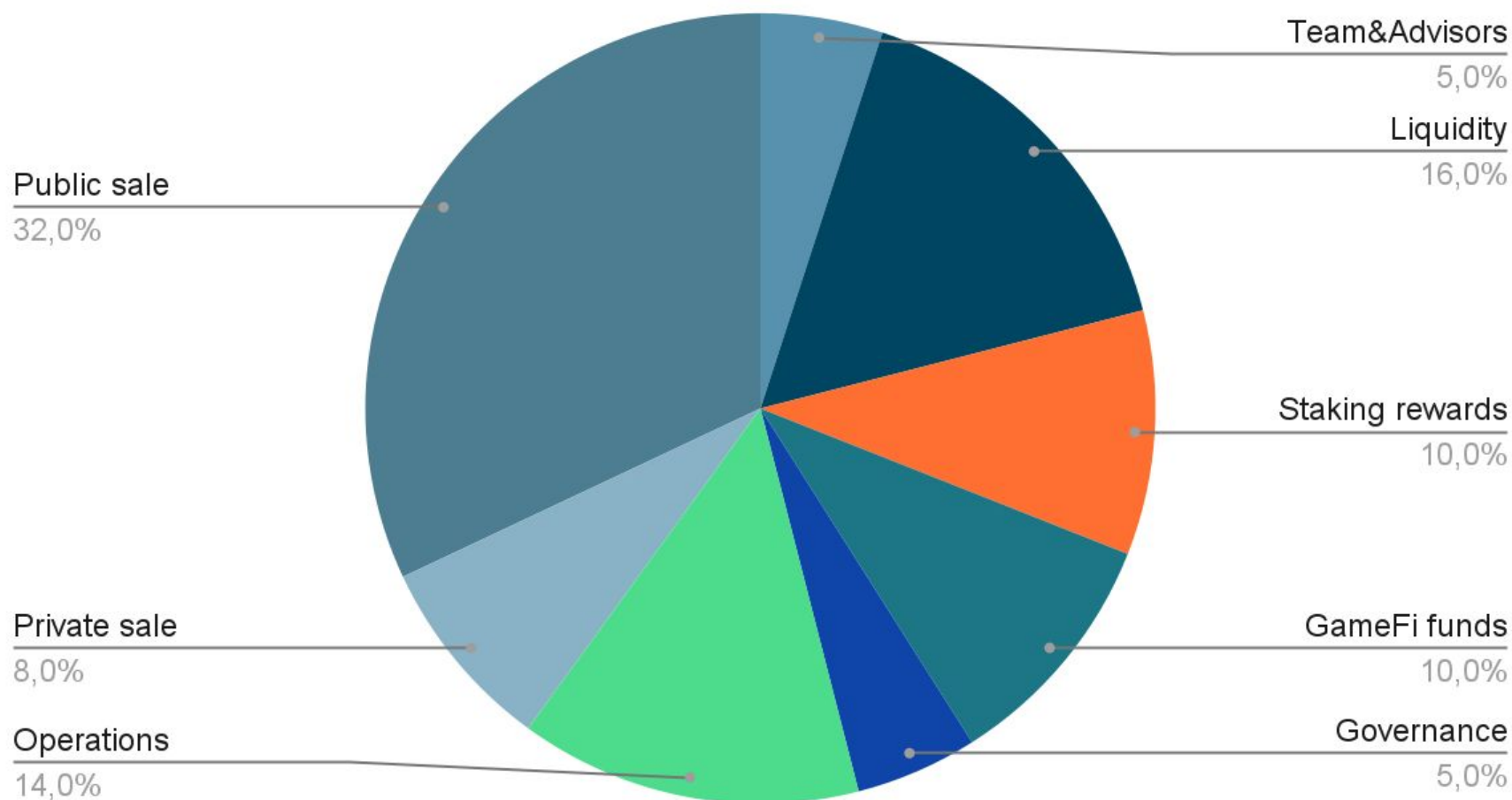
Tokenomics

According to their whitepaper:

- 8% - Private sale
- 32% - Public sale
- 16% - Liquidity
- 10% - Staking rewards

- 10% - GameFi funds
- 5% - Governance
- 5% - Team & Advisors
- 14% - Operations & Ecosystem

Tokens distribution

Team&Advisors
5,0%

Liquidity
16,0%

Public sale
32,0%

Staking rewards
10,0%

Private sale
8,0%

GameFi funds
10,0%

Operations
14,0%

Governance
5,0%

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Metal Shiba
Project & Team Review

According to their whitepaper:

MetalShiba will be utility token which will allow every user to perform several operations within their ecosystem, including the possibility to read their comic, interact with future Marketplace, play the game or stake to earn more tokens, and join the DAO. Members of the Metal Shiba DAO community (who own $METAL tokens or OG NFTs) will be able to participate in voting, token rewards, and NFT rewards. The project will release exclusive collection of 6'000 unique NFTs which will give owners exclusive access to P2E game.

Future development of the project:

- NFT Marketplace
- NFT Launchpad
- NFT Staking service
- NFT Collections
- P2E (play to earn) game

Team:

KYC by GemPad

https://github.com/TheGemPad/GemPadOfficial/blob/main/KYC-Certificates/MetalShib_KYC_GemPad.pdf

Website Analysis

URL: https://metalshiba.art/

- **Design:** Pleasant design, single page, appropriate color scheme.
- **Content:** Informative, no grammar mistakes.
- **Whitepaper:** Well written, explanatory.
- **Roadmap:** Goals set at 3 phases with time frames.
- **Mobile-friendly?** Yes
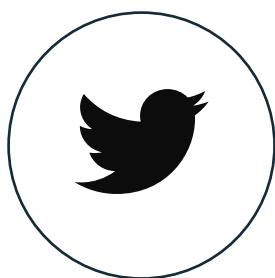- **Technical:** SSL certificate present. General SEO check passed.
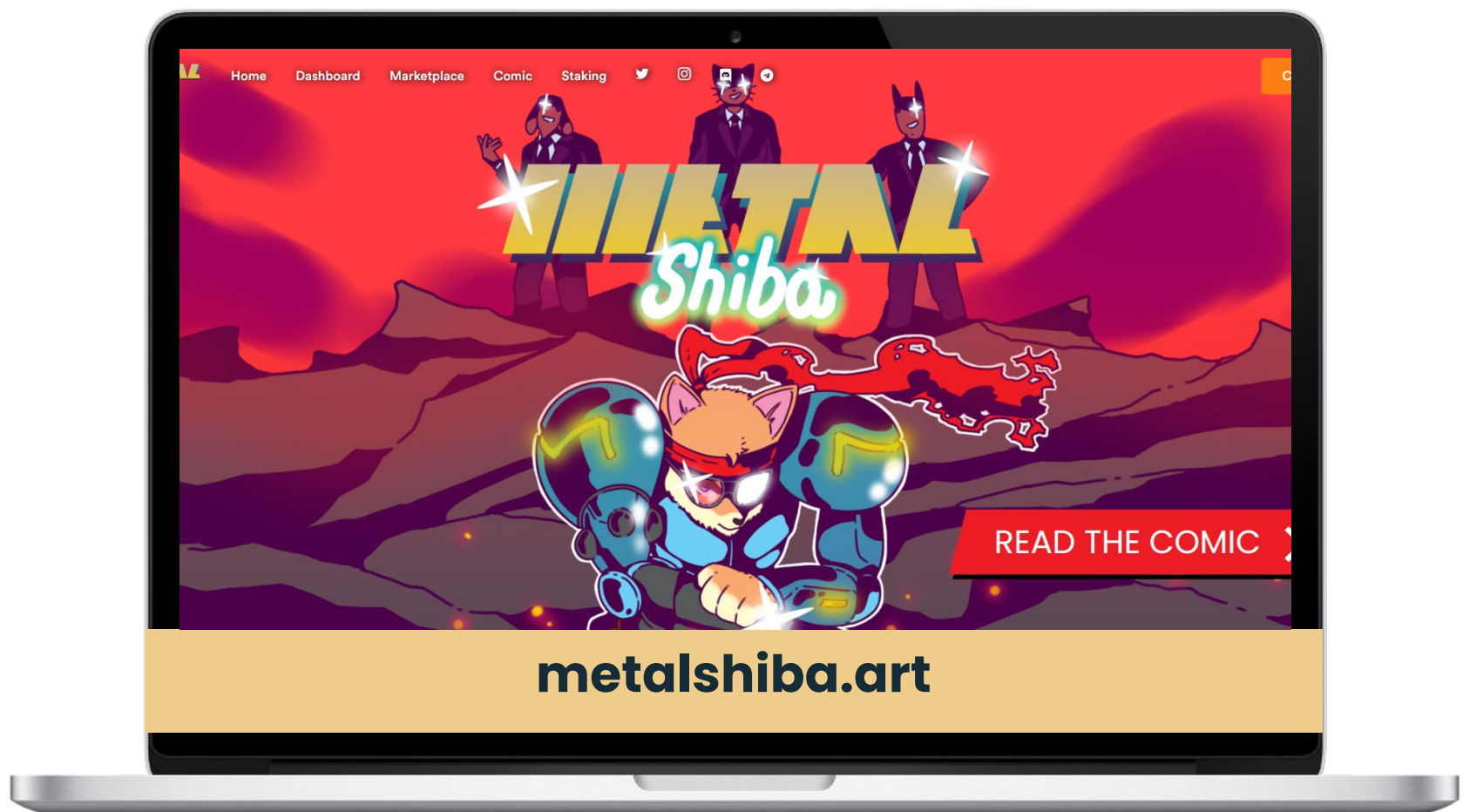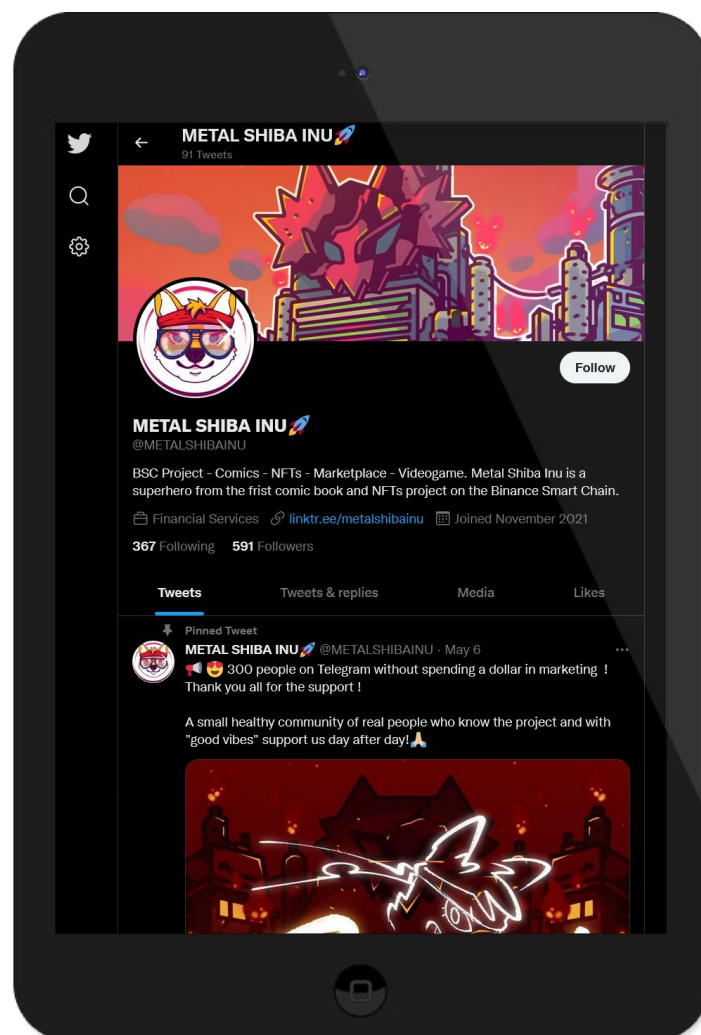
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Social Media & Online Presence

Telegram

https://t.me/metalshibainu

_____

- 1 327 members

- Active members

- Active mods

Twitter

https://twitter.com/METALSHIBAINU

_____

- 597 Followers

- Active

METAL SHIBA INU 🚀
91 Tweets

METAL SHIBA INU 🚀
@METALSHIBAINU

BSC Project - Comics - NFTs - Marketplace - Videogame. Metal Shiba Inu is a superhero from the frist comic book and NFTs project on the Binance Smart Chain.

Financial Services · linktr.ee/metalshibainu · Joined November 2021

367 Following   591 Followers

Tweets   Tweets & replies   Media   Likes

Pinned Tweet
METAL SHIBA INU 🚀 @METALSHIBAINU · May 6
📣🤩 300 people on Telegram without spending a dollar in marketing ! Thank you all for the support !

A small healthy community of real people who know the project and with "good vibes" support us day after day! 🙏

![SpyWolf logo]
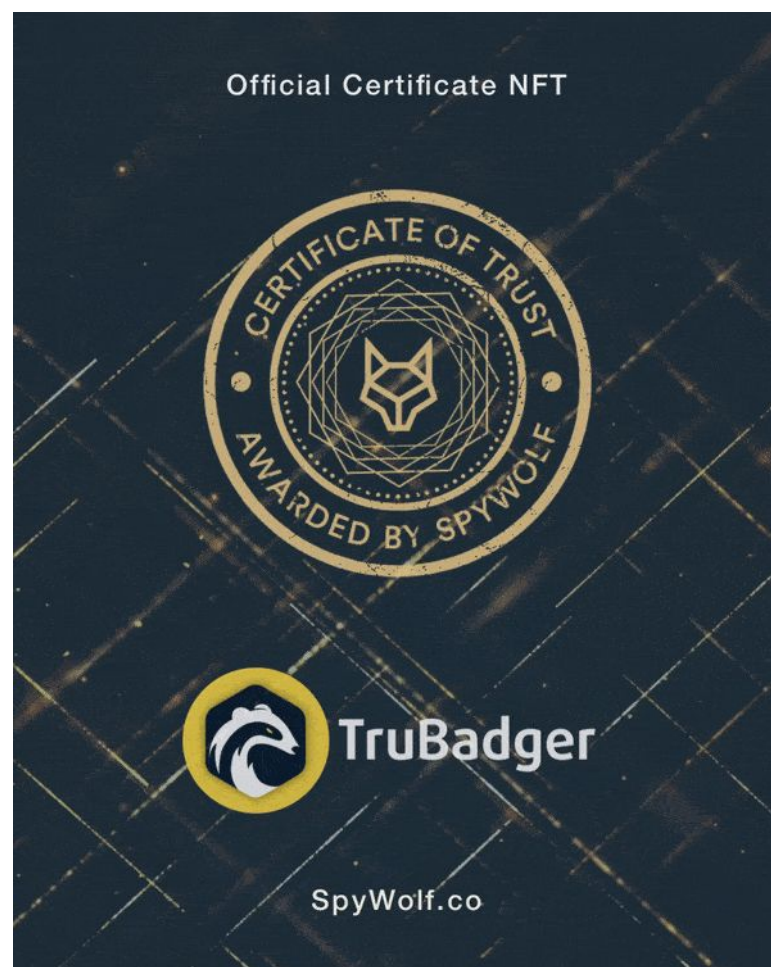
About SpyWolf

SpyWolf is a team of crypto security experts that have been performing full audits for projects for the past months in order to ensure safety on the crypto space. Our goal is to help eliminate monetary fraud through our auditing services and utility token, $SPY.

▶ Website: SpyWolf.co

▶ Portal: SpyWolf.network

▶ Telegram: @SpyWolfNework

▶ Twitter: Twitter.com/SpyWolfNetwork

(Sample Certificate NFT for those who pass audit)

If you are interested in finding out more about our audits and Certificate of Trust NFTs, reach out to contact@spywolf.co.

Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.
While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.